

# *Wideband Tunable Optical Filter*

## Tunable Band-Pass and Band-Rejection Filter

### **WTF-200**

#### Key Features

- Narrow bandwidth filter
- Sharp filter response
- Low insertion loss
- Band-rejection port available (option)
- Custom filter profile

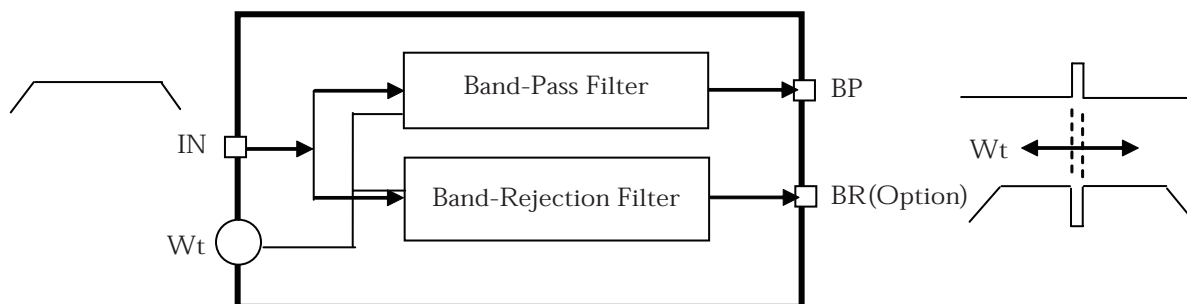


WTF-200 is a tunable optical filter based on our advanced optical filter tuning technologies. Standard products provide six different bandwidths (0.1, 0.2, 0.3, 0.4, 0.5 and 0.6 nm). Customers can choose desirable center wavelength tuning range. The maximum tuning range is 10 nm for narrow bandwidth filter and 20 nm for wide bandwidth filter product, which satisfies most tunable filter applications. Customized product is also available.

#### Applications

- Optical signal selection/rejection
- Background noise suppression
- Optical signal processing
- Tunable lasers

#### Functional Diagram



### Specifications

Parameter	Type Number	Specification			Unit
		Min.	Typ.	Max.	
Tuning Range	T01	10			nm
	T02 - T06	20			nm
Bandwidth, 3dB	T01	0.08	0.1	0.16	nm
	T02	0.17	0.2	0.24	nm
	T03	0.27	0.3	0.34	nm
	T04	0.36	0.4	0.44	nm
	T05	0.46	0.5	0.54	nm
	T06	0.56	0.6	0.64	nm
Peak Insertion Loss	T01		3.5	8	dB
	T02 - T06		2.5	3.5	dB
Insertion Loss Variation	All		0.2	0.5	dB
Out-Band Suppression	All	23	26	40	dB
Center Wavelength	T01, T02	922, 972, 1023, 1028, 1043, 1048, 1314, 1536, 1543, 1552, 1553, 1556, 1563, 1572, 1582, 1588, 1600			nm
	T03	920, 970, 1021, 1026, 1041, 1046, 1312, 1534, 1541, 1550, 1551, 1554, 1561, 1570, 1580, 1586, 1598			nm
	T04, T05, T06	917, 967, 1018, 1023, 1038, 1043, 1309, 1531, 1538, 1547, 1548, 1551, 1558, 1567, 1577, 1583, 1595			nm
Optical Connector		FC or SC, SPC or APC			
Dimensions (W x H x D)		120 x 50 x 205 mm			
Weight		<2kg			

Note: The specifications are subjected to change without prior notice. Please contact Alnair Labs for more details.

### Typical Optical Performance

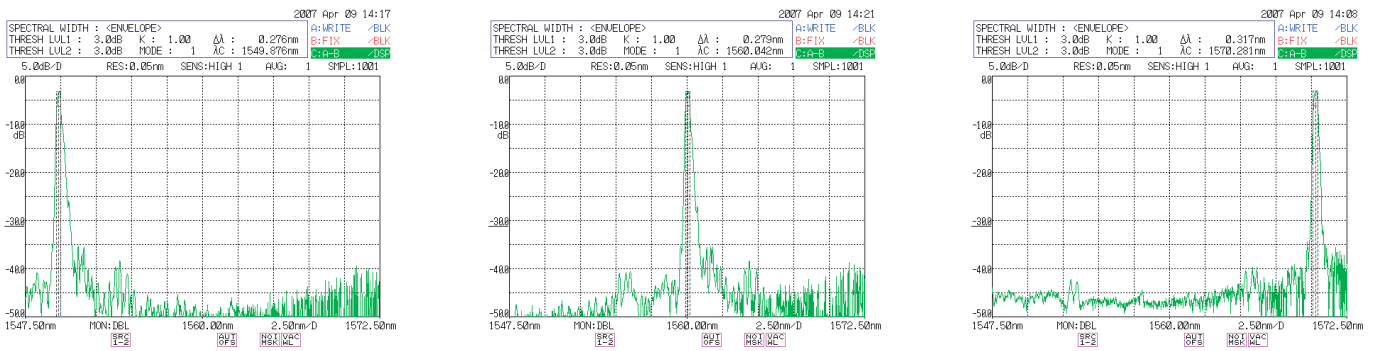
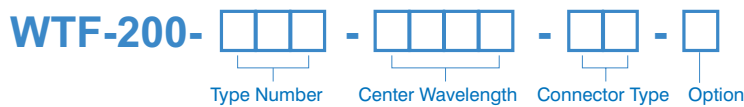


Fig. 1 Spectral responses of the BP output of WTF200-T03-1561 when tuned across the band.

### Ordering Information



Connector Type Code		Option
FS: FC/SPC	SS: SC/SPC	R: Rejection port additional
FA: FC/APC	SA: SC/APC	

### Example:

**WTF - 200 - T03 - 1561 - FS**

\* Customized filters are also available. Please contact Alnair Labs for specific requirements.